

## CLAIMS:

1. A method for editing a recorded data stream, comprising the steps of:  
receiving a frame number from a user interface for an edit point in the recorded data stream selected by a user;  
5 calculating an expected presentation timestamp of the selected frame number;  
adding a first predetermined value to the expected timestamp to form a first time limit;  
subtracting the first predetermined value from the expected presentation timestamp to form a second time limit, wherein the first and second time limits form a time window; and  
10 searching for the selected frame at the expected presentation timestamp on a storage device using said time window.
2. The method according to claim 1, wherein said second time limit is formed by subtracting a second predetermined value from the expected presentation time.  
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3. The method according to claim 1, wherein the predetermined value is less than half the frame period.  
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4. The method according to claim 1, wherein said search step comprises the steps of:  
searching for a CPI which contains a timestamp of the expected presentation timestamp; and  
25 searching a location on the storage device identified by the CPI for an actual timestamp which corresponds to the time window.
5. A method for recording and editing a data stream, comprising the steps of:  
receiving the data stream;  
parsing the data stream to find timestamps for each frame of the data stream;  
determining if the timestamp is correct;

correcting any timestamps which are incorrect.

6. The method according to claim 5, further comprising the steps of:  
receiving a frame number from a user interface for an edit point in the  
recorded data stream selected by a user;  
calculating an expected presentation timestamp of the selected frame number;  
searching for the expected presentation timestamp on a storage device.

7. A method for recording and editing a data stream, comprising the steps of:  
receiving the data stream;  
parsing the data stream to find each CPI in the data stream;  
determining if the timestamps for frames of the data stream are correct in the  
CPI;  
correcting any timestamps in the CPI which are incorrect.

15 8. The method according to claim 7, further comprising the steps of  
receiving a frame number from a user interface for an edit point in the  
recorded data stream selected by a user;  
calculating an expected presentation timestamp of the selected frame number;  
20 searching for the expected presentation timestamp in CPIs of the data stream.

9. An apparatus for editing a recorded data stream, comprising:  
means for receiving a frame number from a user interface for an edit point in  
the recorded data stream selected by a user;  
25 calculating means for calculating an expected presentation timestamp of the  
selected frame number;  
means for adding a first predetermined value to the expected timestamp to  
form a first time limit;  
means for subtracting the first predetermined value from the expected  
30 presentation timestamp to form a second time limit, wherein the first and second time limits  
form a time window; and  
means for searching for the selected frame at the expected presentation  
timestamp on a storage device using said time window.

10. The apparatus according to claim 9, wherein said second time limit is formed by subtracting a second predetermined value from the expected presentation time.

11. The apparatus according to claim 9, wherein the predetermined value is less  
5 than half the frame period.

12. The apparatus according to claim 9, further comprising:  
means for searching for a CPI which contains a timestamp of the expected presentation timestamp; and

10 means for searching a location on the storage device identified by the CPI for an actual timestamp which corresponds to the time window.

13. An apparatus for recording and editing a data stream, comprising:  
means for receiving the data stream;  
15 means for parsing the data stream to find timestamps for each frame of the data stream;  
means for determining if the timestamp is correct;  
means for correcting any timestamps which are incorrect.

20 14. The apparatus according to claim 13, further comprising:  
means for receiving a frame number from a user interface for an edit point in the recorded data stream selected by a user;  
means for calculating an expected presentation timestamp of the selected frame number;  
25 means for searching for the expected presentation timestamp on a storage device.

15. An apparatus for recording and editing a data stream, comprising:  
means for receiving the data stream;  
30 means for parsing the data stream to find each CPI in the data stream;  
means for determining if the timestamps for frames of the data stream are correct in the CPI;  
means for correcting any timestamps in the CPI which are incorrect.

16. The apparatus according to claim 15, further comprising:

means for receiving a frame number from a user interface for an edit point in the recorded data stream selected by a user;

means for calculating an expected presentation timestamp of the selected frame number;

means for searching for the expected presentation timestamp in CPIs of the data stream.